

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-21 (Cancelled).

Claim 22 (Previously Presented): A retransmission control method for a multicast information distribution service which distributes, from an information distribution apparatus, multicast information to a plurality of wireless terminals within a service area of a wireless region, the plurality of wireless terminals each configured to send at an arbitrary time a retransmission request signal when a specified packet previously transmitted by said information distribution apparatus is not received, comprising the steps of:

receiving, at said information distribution apparatus, one of a plurality of said retransmission request signals from a corresponding one of said plurality of wireless terminals;

notifying, by said information distribution apparatus, another of the plurality of wireless terminals that a retransmission request signal corresponding to a specific packet has been received; and

retransmitting, by said information distribution apparatus, the specified packet at a predetermined timing

Claim 23 (Previously Presented): The method of Claim 22, further comprising:

repeating said steps of receiving, notifying and retransmitting until no retransmission request signals are received by said information distribution apparatus or until a predetermined number of retransmissions has occurred.

Claim 24 (Previously Presented): The method of Claim 22, further comprising:

controlling said step of retransmitting so that the specified packet is retransmitted only at the predetermined timing even if a plurality of retransmission request signals are received.

Claim 25 (Previously Presented): The method of Claim 22, further comprising:
notifying, by said information distribution apparatus, the plurality of wireless terminals of the predetermined timing at which the information requested in the retransmission request signal will be retransmitted.

Claim 26 (Previously Presented): The method of Claim 22, further comprising:
notifying, by said information distribution apparatus, the plurality of wireless terminals of

- a channel to be used for a type of information to be retransmitted;
- a retransmission control data transmission period;
- a retransmission control data transmission period timing;
- a channel to be used for transmitting retransmission control data; and
- a number of times said step of repeating executes.

Claim 27 (Previously Presented): The method of Claim 22, further comprising:
controlling, by said information distribution apparatus, the plurality of wireless terminals with at least one of

- a channel to be used for a type of information to be retransmitted;
- a retransmission control data transmission period;
- a retransmission control data transmission period timing;
- a channel to be used for transmitting retransmission control data; and
- a number of times said step of repeating executes.

Claim 28 (Previously Presented): The method of Claim 22, further comprising:

controlling said information distribution apparatus with at least one of

- a channel to be used for a type of information to be retransmitted;
- a retransmission control data transmission period;
- a retransmission control data transmission period timing;
- a channel to be used for transmitting retransmission control data; and
- a number of times said step of repeating executes.

Claim 29 (Previously Presented): The method of Claim 22, further comprising:

notifying, by said information distribution apparatus, the plurality of wireless terminals of

- a packet-specific retransmission request acceptance;
- a packet-specific remaining number of retransmission indicator; and
- a packet-specific retransmission timing.

Claim 30 (Previously Presented): The method of Claim 22, further comprising:

controlling, by said information distribution apparatus, the plurality of wireless terminals with at least one of

- a packet-specific retransmission request acceptance;
- a packet-specific remaining number of retransmission indicator; and
- a packet-specific retransmission timing.

Claim 31 (Previously Presented): The method of Claim 22, further comprising:

controlling, by said information distribution apparatus, said information distribution apparatus with at least one of

- a packet-specific retransmission request acceptance;
- a packet-specific remaining number of retransmission indicator; and
- a packet-specific retransmission timing.

Claim 32 (Previously Presented): The method of Claim 22, further comprising:
determining, by said information distribution apparatus, whether or not a packet identified in a retransmission request signal has been previously identified for retransmission;
and

if a result of said step of determining whether or not a packet has been previously identified is negative, flagging, by said information distribution apparatus, said packet identified in said retransmission request signal.

Claim 33 (Previously Presented): The method of Claim 32, further comprising:
determining, by said information distribution apparatus, whether or not a present timing corresponds to a predetermined timing for providing updated retransmission control information to said plurality of mobiles; and

if a result of said step of determining whether or not a present timing corresponds to a predetermined timing is positive, providing, by said information distribution apparatus, said updated retransmission control information to said plurality of mobiles.

Claim 34 (Previously Presented): The method of Claim 33, further comprising:

determining, by said information distribution apparatus, whether or not said present timing corresponds to a predetermined timing for retransmitting said flagged packet to said plurality of mobiles;

if a result of said step of determining whether or not a present timing corresponds to a predetermined timing for retransmitting is positive, determining, by said information distribution apparatus, whether or not said packet remains to be retransmitted; and

if a result of said step of determining whether said packet remains is positive, retransmitting, by said information distribution apparatus, said flagged packet to said plurality of mobiles.

Claim 35 (Previously Presented): The method of Claim 34, further comprising:

decrementing, by said information distribution apparatus, a remaining number of permissible retransmissions after said step of retransmitting said flagged packet to said plurality of mobiles;

determining, by said information distribution apparatus, whether or not said decremented remaining number of permissible retransmissions is zero; and

if the remaining number of permissible retransmissions is not zero, updating, by said information distribution apparatus, retransmission control data; and

if the remaining permissible number of retransmissions is zero, deleting, by said information distribution apparatus, a retransmission request record and updating retransmission control data.

Claim 36 (Previously Presented): The method of Claim 35, further comprising:

reprioritizing, by said information distribution apparatus, a sequence of packets to be retransmitted after said step of retransmitting said flagged packet.

Claim 37 (Previously Presented): A computer program product, comprising instructions configured to enable information distribution apparatus to execute any one of Claims 22 – 36.

Claim 38 (Previously Presented): An information distribution apparatus in a multicast information distribution service, said information distribution apparatus configured to distribute multicast information to a plurality of wireless terminals within a service area of a wireless region, the plurality of wireless terminals each configured to send at an arbitrary time a retransmission request signal when a specified packet previously transmitted by said information distribution apparatus is not received, said information distribution apparatus comprising:

a receiver configured to receive one of a plurality of said retransmission request signals from a corresponding one of said plurality of wireless terminals;

a notification device configured to notify another of the plurality of wireless terminals that a retransmission request signal corresponding to a specific packet has been received; and

a transmitter configured to retransmit the specified packet at a predetermined timing;

Claim 39 (Previously Presented): The information distribution apparatus of Claim 38, further comprising:

a controller configured to cause the information distribution apparatus to repeat steps of receiving, notifying and retransmitting until no retransmission request signals are received by said information distribution apparatus or until a predetermined number of retransmissions has occurred.

Claim 40 (Previously Presented): The information distribution apparatus of Claim 38, further comprising:

a controller configured to control the information distribution apparatus so that the specified packet is retransmitted only at the predetermined timing even if a plurality of retransmission request signals are received.

Claim 41 (Previously Presented): The information distribution apparatus of Claim 38, further comprising:

a notification device configured to notify the plurality of wireless terminals of the predetermined timing at which the information requested in the retransmission request signal will be retransmitted.

Claim 42 (Previously Presented): The information distribution apparatus of Claim 38, further comprising:

a notification device configured to notify the plurality of wireless terminals of

- a channel to be used for a type of information to be retransmitted;
- a retransmission control data transmission period;
- a retransmission control data transmission period timing;
- a channel to be used for transmitting retransmission control data; and
- a number of times said step of repeating executes.

Claim 43 (Previously Presented): The information distribution apparatus of Claim 38, further comprising:

a controller configured to control the plurality of wireless terminals with at least one of

- a channel to be used for a type of information to be retransmitted;
- a retransmission control data transmission period;
- a retransmission control data transmission period timing;
- a channel to be used for transmitting retransmission control data; and
- a number of times said step of repeating executes.

Claim 44 (Previously Presented): The information distribution apparatus of Claim 38, further comprising:

a controller configured to control said information distribution apparatus with at least one of

- a channel to be used for a type of information to be retransmitted;
- a retransmission control data transmission period;
- a retransmission control data transmission period timing;
- a channel to be used for transmitting retransmission control data; and
- a number of times said step of repeating executes.

Claim 45 (Previously Presented): The information distribution apparatus of Claim 38, further comprising:

a notification device configured to notify the plurality of wireless terminals of

- a packet-specific retransmission request acceptance;
- a packet-specific remaining number of retransmission indicator; and
- a packet-specific retransmission timing.

Claim 46 (Previously Presented): The information distribution apparatus of Claim 38, further comprising:

a controller configured to control the plurality of wireless terminals with at least one of

- a packet-specific retransmission request acceptance;
- a packet-specific remaining number of retransmission indicator; and
- a packet-specific retransmission timing.

Claim 47 (Previously Presented): The information distribution apparatus of Claim 38, further comprising:

a controller configured to control said information distribution apparatus with at least one of

- a packet-specific retransmission request acceptance;
- a packet-specific remaining number of retransmission indicator; and
- a packet-specific retransmission timing.

Claim 48 (Previously Presented): The information distribution apparatus of Claim 38, further comprising:

a controller configured to:

- determine whether or not a packet identified in a retransmission request signal has been previously identified for retransmission; and
- flag said packet identified in said retransmission request signal for retransmission if the controller determines said packet has not been previously identified for retransmission.

Claim 49 (Previously Presented): The information distribution apparatus of Claim 48, wherein said controller is configured to:

determine whether or not a present timing corresponds to a predetermined timing for providing updated retransmission control information to said plurality of mobiles; and

cause said information distribution apparatus to transmit said updated retransmission control information to said plurality of mobiles if the controller determines that the present timing corresponds to the predetermined timing.

Claim 50 (Previously Presented): The information distribution apparatus of Claim 49, wherein said controller is configured to:

determine whether or not said present timing corresponds to a predetermined packet retransmission timing;

determine whether or not said flagged packet remains to be retransmitted if the controller determines that the present timing corresponds to the predetermined packet retransmission timing; and

cause said information distribution apparatus to retransmit said flagged packet to said plurality of mobiles if said controller determines said packet flagged remains to be retransmitted.

Claim 51 (Previously Presented): The information distribution apparatus of Claim 50, wherein said controller is configured to:

decrement a remaining number of retransmissions for said flagged packet;

determine whether or not said decremented remaining number of retransmissions is zero; and

update retransmission control data for said flagged packet if the remaining number of retransmissions is not zero; and

delete a record of a retransmission request for said flagged packet and then update the retransmission control data if the remaining number of retransmissions for said flagged packet is zero.

Claim 52 (Previously Presented): The information distribution apparatus of Claim 51, wherein said controller is configured to:

reprioritize a sequence of packets to be retransmitted after said flagged packet is retransmitted.

Claim 53 (Previously Presented): A base station configured to include an information distribution apparatus as recited in any one of Claims 38-52.

Claim 54 (Previously Presented): A retransmission control method for mobile terminal in a multicast information distribution service which distributes, from an information distribution apparatus, multicast information to a plurality of wireless terminals within a service area of a wireless region, comprising the steps of:

receiving, from said information distribution apparatus, indication that a specified packet has been sent from said information distribution apparatus;

transmitting at an arbitrary time, to said information distribution apparatus, a retransmission request signal when said specified packet is not received;

receiving, from said information distribution apparatus, an acknowledgement indicating that said retransmission request signal has been received, said acknowledgement broadcast to each of said plurality of wireless terminals; and

receiving, from said information distribution apparatus, the specified packet at a predetermined timing; wherein

said wireless terminal configured to operate in parallel to another wireless terminal within said service area of said wireless region, each simultaneously configured to send retransmission request signals at arbitrary times.

Claim 55 (Previously Presented): The method of Claim 54, further comprising:
receiving, from said information distribution apparatus, notification of the predetermined timing at which the information requested in the retransmission request signal will be retransmitted.

Claim 56 (Previously Presented): The method of Claim 54, further comprising:
receiving, from said information distribution apparatus, notification of
a channel to be used for a type of information to be retransmitted;
a retransmission control data transmission period;
a retransmission control data transmission period timing;
a channel to be used for transmitting retransmission control data; and
a number of times said step of repeating executes.

Claim 57 (Previously Presented): The method of Claim 54, further comprising:
receiving, from said information distribution apparatus, notification of
a packet-specific retransmission request acceptance;
a packet-specific remaining number of retransmission indicator; and
a packet-specific retransmission timing.

Claim 58 (Previously Presented): The method of Claim 54, further comprising:
receiving distribution information about a distribution service;

determining if said distribution information indicates said distribution service permits retransmissions; and

if said distribution service permits retransmissions, determining if a packet has been missed or requires correction.

Claim 59 (Previously Presented): The method of Claim 58, further comprising:

if said step of determining if a packet has been missed or requires correction is affirmative resulting in identification of a packet to be retransmitted, determining from said distribution information if a present time corresponds to a reception time for receiving retransmission control information;

if said present time corresponds to said reception time for receiving retransmission control information, receiving said retransmission control information; and

determining if said packet to be retransmitted is listed in said retransmission control information.

Claim 60 (Previously Presented): The method of Claim 59, further comprising:

if said packet to be retransmitted is not listed in said retransmission control information, determining whether a time out of a random timer has occurred;

if said time out has occurred, sending a retransmission request signal.

Claim 61 (Previously Presented): The method of Claim 60, further comprising:

if said time out has not occurred, determining from said distribution information if a next present time corresponds to a next reception time for receiving retransmission control information;

if said next present time does not corresponds to said next reception time for receiving retransmission control information, repeating said steps of determining whether a time out of a random timer has occurred and, if said time out has not occurred, determining from said distribution information if a next present time corresponds to a next reception time for receiving retransmission control information, until said time out has occurred; and sending a retransmission request signal.

Claim 62 (Previously Presented): The method of Claim 61, further comprising:

if said packet to be retransmitted is listed in said retransmission control information, determining whether said present time corresponds to a time to receive a retransmitted packet corresponding to said packet to be retransmitted;

if said present time corresponds to said time to receive a retransmitted packet; receiving said retransmitted packet;

if said present time does not corresponds to said time to receive a retransmitted packet; repeating said steps of

determining from said distribution information if a present time corresponds to a reception time for receiving retransmission control information;

receiving said retransmission control information; and

determining if said packet to be retransmitted is listed in said retransmission control information; and

receiving said packet to be retransmitted when said present time corresponds to a reception time for receiving retransmission control information said packet to be retransmitted is listed in said retransmission control information.

Claim 63 (Previously Presented): A computer program product, comprising instructions configured to enable a mobile terminal to execute any one of Claims 54-62.

Claim 64 (Previously Presented): A mobile terminal configured for use in a multicast information distribution service which distributes, from an information distribution apparatus, multicast information to a plurality of wireless terminals within a service area of a wireless region, said mobile terminal comprising:

a receiver configured to receive, from said information distribution apparatus, indication that a specified packet has been sent from said information distribution apparatus;

a transmitter configured to transmit at an arbitrary time, to said information distribution apparatus, a retransmission request signal when said specified packet is not received;

said receiver further configured to receive, from said information distribution apparatus, an acknowledgement indicating that said retransmission request signal has been received, said acknowledgement broadcast to each of said plurality of wireless terminals; and

said receiver further configured to receive, from said information distribution apparatus, the specified packet at a predetermined timing; wherein

said wireless terminal is configured to operate in parallel to another wireless terminal within said service area of said wireless region, each simultaneously configured to send retransmission request signals at arbitrary times.

Claim 65 (Previously Presented): The mobile terminal of Claim 64, said receiver further configured to receive, from said information distribution apparatus, notification of the predetermined timing at which the information requested in the retransmission request signal will be retransmitted.

Claim 66 (Previously Presented): The mobile terminal of Claim 64, said receiver further configured to receive, from said information distribution apparatus, notification of

- a channel to be used for a type of information to be retransmitted;
- a retransmission control data transmission period;
- a retransmission control data transmission period timing;
- a channel to be used for transmitting retransmission control data; and
- a number of times said step of repeating executes.

Claim 67 (Previously Presented): The mobile terminal of Claim 64, said receiver further configured to receive, from said information distribution apparatus, notification of

- a packet-specific retransmission request acceptance;
- a packet-specific remaining number of retransmission indicator; and
- a packet-specific retransmission timing.

Claim 68 (Previously Presented): The mobile terminal of Claim 64, said receiver further configured to receive distribution information about a distribution service, said mobile terminal further comprising:

- a controller configured to determine if said distribution information indicates said distribution service permits retransmissions; and if said distribution service permits retransmissions, determine if a packet has been missed or requires correction.

Claim 69 (Previously Presented): The mobile terminal of Claim 68, said controller further configured to:

if a packet has been missed or requires correction is affirmative resulting in identification of a packet to be retransmitted, determine from said distribution information if a present time corresponds to a reception time for receiving retransmission control information;

if said present time corresponds to said reception time for receiving retransmission control information, receive said retransmission control information; and

determine if said packet to be retransmitted is listed in said retransmission control information.

Claim 70 (Previously Presented): The mobile terminal of Claim 69, said controller further configured to:

if said packet to be retransmitted is not listed in said retransmission control information, determine whether a time out of a random timer has occurred;

if said time out has occurred, send a retransmission request signal.

Claim 71 (Currently Amended): The mobile terminal of Claim 70, said controller further configured to:

if said time out has not occurred, determine from said distribution information if a next present time corresponds to a next reception time for receiving retransmission control information;

if said next present time does not correspond to said next reception time for receiving retransmission control information, ~~repeatedly~~ repeatedly determine whether a time out of a random timer has occurred, and if said time out has not occurred, determine from said distribution information if a next present time corresponds to a next reception time for

receiving retransmission control information until said time out has occurred, and then send a retransmission request signal.

Claim 72 (Currently Amended): The mobile terminal of Claim 71, said controller further configured to:

if said packet to be retransmitted is listed in said retransmission control information, determine whether said present time corresponds to a time to receive a retransmitted packet corresponding to said packet to be retransmitted;

if said present time corresponds to said time to receive a retransmitted packet; receive said retransmitted packet;

if said present time does not corresponds to said time to receive a retransmitted packet; ~~repeatedly~~ repeatedly

determine from said distribution information if a present time corresponds to a reception time for receiving retransmission control information;

receive said retransmission control information; and

determine if said packet to be retransmitted is listed in said retransmission control information; and

receive said packet to be retransmitted when said present time corresponds to a reception time for receiving retransmission control information said packet to be retransmitted is listed in said retransmission control information.

Claim 73 (New): A retransmission control method for a multicast information distribution service which distributes multicast information with respect to a plurality of wireless terminals within a service area from an information distribution apparatus via a wireless region, comprising the steps of:

(a) transmitting a retransmission request for information which requires retransmission, from an arbitrary wireless terminal to the information distribution apparatus, at a timing determined by the wireless terminal when the information which requires retransmission is generated;

(b) after receiving the retransmission request for the information from the arbitrary wireless terminal within the service area, notifying retransmission information indicating the information requested by the retransmission request with respect to each of the wireless terminals within the service area from the information distribution apparatus, and retransmitting the information requested by the retransmission request from the information distribution apparatus at a predetermined timing; and

(c) making no retransmission request for the information from each of the wireless terminals if the retransmission information is received by each of the wireless terminals before the predetermined timing, so that each of the wireless terminals receives the information retransmitted from the information distribution apparatus at the predetermined timing.

Claim 74 (New): The retransmission control method for the multicast information distribution service as claimed in claim 73, further comprising the step of:

(d) intensively managing in the information distribution apparatus retransmission requests for the same information made with respect to the same multicast information distribution service until the predetermined timing, and retransmitting from the information distribution apparatus information related to intensively managed retransmission requests at the predetermined timing.

Claim 75 (New): The retransmission control method for the multicast information distribution service as claimed in claim 73, further comprising the steps of:

(d) including information indicating the predetermined timing at which the information requested by the retransmission request is will be retransmitted in the retransmission information, and notifying each of the wireless terminals within the service area from the information distribution apparatus information related to a transmission channel and a transmission timing for notifying the retransmission information and information related to a transmission channel for retransmitting the information requested by the retransmission request; and

(e) receiving the retransmission information by each of the wireless terminals within the service area based on the information which is received from the information distribution apparatus and is related to the transmission channel and the transmission timing for notifying the retransmission information, and receiving the information retransmitted from the information distribution apparatus based on the information related to the transmission channel for retransmitting the information and the information related to the predetermined timing included in the retransmission information which are received from the information distribution apparatus.

Claim 76 (New): The retransmission control method for the multicast information distribution service as claimed in claim 73, further comprising the step of:

(d) managing the information requested by the retransmission request in categories according to a predetermined rule, and managing timings for retransmitting the information for each of the categories, in the information distribution apparatus.

Claim 77 (New): The retransmission control method for the multicast information distribution service as claimed in claim 73, further comprising the step of:

(d) controlling an upper limit value of a number of retransmissions of the information requested by the retransmission request depending on the multicast information which is distributed from the information distribution apparatus.

Claim 78 (New): A retransmission control system for a multicast information distribution service which distributes multicast information with respect to a plurality of wireless terminals within a service area from an information distribution apparatus via a wireless region, comprising:

a timing determination part, in each wireless terminal, configured to determine a timing at which a retransmission request for information which requires retransmission is to be transmitted when the information which requires retransmission is generated;

a first retransmission control part, in each wireless terminal, configured to transmit the retransmission request for the information with respect to the information distribution apparatus at the timing determined by said timing determination part;

a retransmission control information managing part, in the information distribution apparatus, configured to manage retransmission information indicating the information requested by the retransmission request after receiving the retransmission request for the information from an arbitrary wireless terminal within the service area; and

a second retransmission control part, in the information distribution apparatus, configured to transmit information related to the retransmission request indicated by the retransmission information to each wireless terminal within the service area at a predetermined timing,

wherein each wireless terminal makes no retransmission request for the information by the first retransmission controls part if the retransmission information is received before the timing determined by said timing determination part, so that each wireless terminal receives the information retransmitted from the information distribution apparatus at the predetermined timing.

Claim 79 (New): The retransmission control system for the multicast information distribution service as claimed in claim 78, further comprising:

a distribution information managing part, in the information distribution apparatus, configured to intensively manage retransmission requests for the same information made with respect to the same multicast information distribution service until the predetermined timing,

said second retransmission control part retransmitting information related to the retransmission requests intensively managed by said distribution information managing part at the predetermined timing.

Claim 80 (New): The retransmission control system for the multicast information distribution service as claimed in claim 78, wherein:

information which is related to the predetermined timing at which the information requested by the retransmission request is retransmitted, is included in the retransmission information,

said information distribution apparatus notifies each of the wireless terminals within the service area information related to a transmission channel and a transmission timing for notifying the retransmission information and information related to a transmission channel for retransmitting the information requested by the retransmission request, by the second retransmission control part, and

said first retransmission control part in each wireless terminal receives the retransmission information based on the information which is received from the information distribution apparatus and is related to the transmission channel and the transmission timing for notifying the retransmission information, and receives the information retransmitted from the information distribution apparatus based on the information related to the transmission channel for retransmitting the information and the information related to the predetermined timing included in the retransmission information which are received from the information distribution apparatus.

Claim 81 (New): The retransmission control system for the multicast information distribution service as claimed in claim 78, further comprising:

a managing part, in the information distribution apparatus, configured to manage the information requested by the retransmission request in categories according to a predetermined rule, and managing timings for retransmitting the information for each of the categories.

Claim 82 (New): The retransmission control system for the multicast information distribution service as claimed in claim 78, further comprising:

a retransmission control information managing part, in the information distribution apparatus, configured to manage an upper limit value of a number of retransmissions of the information requested by the retransmission request depending on the multicast information which is distributed from the information distribution apparatus.

Claim 83 (New): A retransmission control apparatus which is provided in an information distribution apparatus which distributes multicast information with respect to a

plurality of wireless terminals within a service area via a wireless region and controls retransmission of information, comprising:

a retransmission information transmission control part configured to notify retransmission information indicating information requested by a retransmission request with respect to each of the wireless terminals within the service area after receiving the retransmission request from an arbitrary wireless terminal within the service area; and

a retransmission control part configured to transmit the information requested by the retransmission request and indicated by the retransmission information at a predetermined timing, so that each of the wireless terminals determines whether or not to make a retransmission request for the information by referring to the retransmission information notified by said retransmission information transmission control part when information which requires retransmission is generated.

Claim 84 (New): The retransmission control apparatus as claimed in claim 83, further comprising:

a distribution information managing part configured to intensively manage retransmission requests for the same information with respect to the same multicast information distribution service until the predetermined timing is reached,

said retransmission control part retransmitting information related to the retransmission requests intensively managed by said distribution information managing part at the predetermined timing.

Claim 85 (New): The retransmission control apparatus as claimed in claim 83, wherein:

information which is related to the predetermined timing at which the retransmission of the information requested by the retransmission request is made, is included in the retransmission information,

the retransmission control part notifies each of the wireless terminals within the service area information related to a transmission channel and a transmission timing for notifying the retransmission information and information related to a transmission channel for retransmitting the information requested by the retransmission request, so that each of the wireless terminals within the service area receives the information which is retransmitted, based on the information included in the retransmission information and the information which is notified by said retransmission control part.

Claim 86 (New): The retransmission control apparatus as claimed in claim 83, further comprising:

a managing part configured to manage the information requested by the retransmission request in categories according to a predetermined rule, and managing timings for retransmitting the information for each of the categories.

Claim 87 (New): The retransmission control apparatus as claimed in claim 83, further comprising:

a retransmission control information management control part configured to control an upper limit value of a number of retransmissions of the information requested by the retransmission request depending on the multicast information which is distributed.

Claim 88 (New): A wireless terminal which receives multicast information distributed from an information distribution apparatus via a wireless region, and receives

information retransmitted from the information distribution apparatus according to a retransmission control, comprising:

a timing determination part configured to determine a timing for transmitting a retransmission request for information which requires retransmission; and

a retransmission control part configured to transmit the retransmission request for the information with respect to the information distribution apparatus at the timing determined by said timing determination part,

said retransmission control part making no retransmission request for the information if retransmission information, which indicates that a retransmission request for the information has already been received by the information distribution apparatus, is received from the information distribution apparatus before the timing determined by said timing determination part, so as to receive the information retransmitted from the information distribution apparatus at a predetermined timing, said retransmission information including timing information indicating the predetermined timing at which the information will be retransmitted.

Claim 89 (New) The wireless terminal as claimed in claim 88, wherein:

said retransmission control part receives the retransmission information based on information which is received from the information distribution apparatus and indicates a transmission channel and a transmission timing for notifying the retransmission information, and receives the information retransmitted from the information distribution apparatus based on the information indicating the transmission channel for retransmitting the information and the timing information indicating the predetermined timing included in the retransmission information which are received from the information distribution apparatus.

Claim 90 (New): A wireless base station for distributing multicast information with respect to a plurality of wireless terminals within a service area, comprising:

a notifying part configured to notify retransmission information, which indicates that predetermined information is has been requested by a retransmission request, to each of the wireless terminals within the service area, in response to the retransmission request from an arbitrary wireless terminal within the service area, said retransmission information including timing information indicating a predetermined timing at which the predetermined information will be retransmitted.

Claim 91 (New): The wireless base station as claimed in claim 90, further comprising:

a retransmitting part configured to retransmit the predetermined information requested by the retransmission request to each of the wireless terminals within the service area, at the predetermined timing.

Claim 92 (New): The wireless base station as claimed in claim 91, wherein said retransmitting part copes with one retransmission of the predetermined information with respect to a plurality of retransmission requests which request the predetermined information, if the retransmission request requesting the predetermined information is received from one or more wireless terminals within the service area before the predetermined information is retransmitted to each of the wireless terminals within the service area.

Claim 93 (New): A wireless terminal which is usable within an arbitrary service area, comprising:

a retransmission request part configured to make a retransmission request with respect to a wireless base station when predetermined information which requires retransmission is generated; and

a control part configured to discontinue transmission of the retransmission request for the predetermined information from said retransmission request part when notified of retransmission information which indicates that a retransmission request for the predetermined information has been made from another wireless terminal within the arbitrary service area at a timing before said retransmission request part makes the retransmission request.